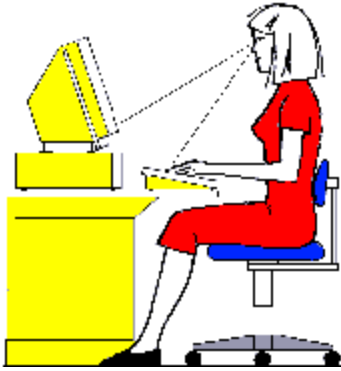


ERGONOMICS... ***FITTING THE JOB TO THE WORKER***



Musculoskeletal injuries at work are often caused by wear and tear on tendons, muscles, and sensitive nerve tissues due to physically awkward working conditions. These injuries are also called wear and tear disorders, overuse injuries, repetitive strain injuries, repetitive motion disorders, and cumulative trauma disorders. They develop gradually over periods of weeks, months, or even years as a result of repeated stresses on particular parts of the body. Symptoms include pain, restricted joint movement, swelling, and decreased sense of touch or manual dexterity if nerves are affected. Effects may occur quickly or only after prolonged exposure.

Ergonomic principles can be applied to prevent or minimize this type of disorder. Defined simply as "the study of work," ergonomics seeks to adapt the job to the person, rather than adapt the person to the job. This adaptation can be accomplished by designing tasks, work stations, tools, and equipment that are within the worker's physical capabilities and limitations.

Ergonomic principles

- *Keep everything within easy reach.*
- *Reduce excessive forces.*
- *Work in good postures.*
- *Reduce excessive repetition.*
- *Provide adjustability and change of posture.*

The first step is to recognize the pain you feel when spending time at your computer, sitting, standing or bending for periods of time, or when lifting and carrying loads. The next step is to promptly report such discomforts to your supervisor and the Medical Department.

Investigation and observation of your work activity by your supervisor and other people knowledgeable of ergonomic principles will take place to identify corrective actions. The sooner your pain is reported, the sooner a solution can be identified and implemented. This will go a long way in controlling and probably eliminating further discomfort. Remember, your pain will probably only get worse if you try to ignore it and hope that it will go away.

In order to help the Lab deal with this important issue, an Ergonomics Subcommittee was formed in January 1998 as part of the Laboratory Safety Committee. It has representation from each division/section at the Lab. The members are Amy Pavnica (ES&H/CD, Chairperson), Mary Grace (ES&H), Dale Knapp (ES&H/BS), Maureen Huey (PPD), Dave Cathey (BD), Richard Rebstock (TD), Greg Mitchell (FESS) and Lisa King (FESS). The subcommittee is taking a methodical approach to studying various workstations as well as reviewing old and new accidents/incidents. They are responsible for developing recommendations to help prevent future injuries. In addition, subcommittee members are available to help investigate specific ergonomic-related issues.

The elimination of ergonomic-related injuries depends on your help. Please report to either your supervisor or the Medical Department if you

experience any pain or discomfort that you think may be related to your work.

Accomplishments and additional information

Since its inception, the Ergonomics Subcommittee has been actively working to address the Lab's ergonomic issues. Below are examples of their accomplishments to date and people to contact for further information.

- ***BackWorks Program***: The committee conducted a trend analysis on the Lab's ergonomic-related injuries/illnesses. As expected, back injuries turned out to be the most common type. Emphasis was subsequently placed on back safety and safe lifting training. Over 1100 Fermilab employees have already taken the BackWorks class. Contact Joel Kofron at X8444 to sign up for the training.
- An ***ergonomic consultant*** visited Fermilab. She performed a number of workstation assessments and provided training to subcommittee members at the same time.
- Committee members initiated a program of ***workstation evaluations***. Evaluations are conducted based on requests from employees, supervisors, building managers or group leaders. Workstation revisions have already resulted. Contact your committee representative if you would like to have your workstation assessed.
- The committee, with the assistance of FES, has identified several ***ergonomically designed chairs*** for Lab employees to try out before purchasing. Contact Lisa King at X3185 for more information.
- FES purchased various ***lifting devices*** to minimize some of the manual lifting demands within their organization. Administrative controls have been implemented as well. Contact Greg Mitchell at X8002 for more information.
- A ***Backbelt Program*** was set up that includes an exam from Medical, training on the uses and misuses of backbelts and an issuance of a backbelt. Interested individuals can contact Amy Pavnica at X8493.
- PPD has a range of demonstration ***computer mice*** alternatives to try out before making a purchase. Contact Maureen Huey at X2977 for additional information.
- ***Awareness training*** on ergonomics is now presented as part of New Employee Orientation Training. Contact Amy Pavnica at X8493 if you would like a similar orientation.